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| Rubric: Inquiry Investigation | | | | |
| Criteria | Level 1 (Limited) | Level 2 (Fair) | Level 3 (Proficient) | Level 4 (Excellent) |
| Initiating (Questioning and Hypothesizing) | • asks few questions about the task; questions are vague and unfocused | • asks simple questions that focus the investigation somewhat | • asks questions that clarify the task and focus the investigation | • asks relevant, clear ques- tions about the task |
| • demonstrates limited under- standing of concepts related to the task | • demonstrates some under- standing of concepts related to the task | • demonstrates general under- standing of concepts related to the task | • demonstrates a thorough understanding of concepts related to the task |
| • unable to generate hypothesis | • generates a questionable hypothesis | • generates a valid hypothesis | • generates an insightful hypothesis |
| Planning | • develops disorganized or unworkable procedures | • develops a partial set of simple procedures, not all of which are appropriate | • develops an appropriate, complete set of procedures that may lack efficiency or clarity | • develops procedures that are appropriately efficient and complete |
| • identifies and controls few variables | • identifies and controls some major variables | • identifies and controls most major variables | • identifies and controls all major variables |
| Conducting and  Recording | • follows few of the prescribed procedures | • follows some of the pre- scribed procedures | • follows most of the pre- scribed procedures | • follows all of the prescribed procedures |
| • recordings are disorganized and contain major errors or omissions | • recordings are somewhat organized and contain sev- eral major errors or omissions | • recordings are organized and contain few errors or omissions | • recordings are organized effi- ciently and effectively with practically no errors |
| • demonstrates required skills and strategies in a limited way | • demonstrates required skills and strategies with some competence | • competently demonstrates required skills and strategies | • demonstrates required skills and strategies with a high degree of competence |
| • requires constant reminders to follow safety procedures | • requires some reminders to follow safety procedures | • follows safety procedures with only occasional lapses | • routinely follows safety procedures |
| • equipment, and materials with limited competence | • uses tools, equipment, and materials with some competence | • competently uses tools, equipment, and materials | • uses tools, equipment, and materials with a high degree of competence |
| • makes few observations | • makes some fair observations | • makes sufficient observations | • makes insightful observations |

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| Rubric: Inquiry Investigation *(continued)* | | | | |
| Criteria | Level 1 (Limited) | Level 2 (Fair) | Level 3 (Proficient) | Level 4 (Excellent) |
|  | • records little data; data is irrelevant and/or inaccurate | • records data but organization is lacking; some inaccuracies | • records most relevant data in an organized way; adequate  in detail and generally accurate | • records all relevant data in  an organized and skillful way;  accurately |
| • does not modify plan | • requires prompting to modify plan | • modifies plan as necessary | • modifies the plan in insightful ways; justifies modifications |
| Analyzing and  Interpreting | • provides no analysis of the data | • explains data but provides limited analysis | • provides some analysis of the data | • provides insightful analysis of the data |
| • arrives at illogical/or irrelevant conclusions | • attempts to draw some con- clusions partially based on the data; not clearly stated; conclusions may not relate to original task | • draws some valid conclu- sions based on the data; rel- evant and clearly stated; draws conclusion that relates to the original task | • draws clearly stated conclu- sions based on the data |
| • provides no evaluation of methods used | • provides limited evaluation of methods used | • provides some evaluations of methods used | • provides a thorough evaluation of methods used |
| • makes no inferences | • makes few inferences | • makes some appropriate inferences | • makes insightful inferences |
| Communicating | • displays some information  but without clear organization | • displays information but may lack organization | • displays information in an organized way | • displays information in a skillfully organized way |
| • frequent errors in the use of units and terminology inter- fere with communication | • some errors in the use of units and terminology but they do not interfere with communication | • minor errors in the use of units and terminology | • few, if any, errors in the use of units and terminology |
| • provides incomplete and confusing explanations | • provides some explanations that may be incorrect | • provides explanations that are generally correct but may lack detail or completeness | • provides explanations that are correct and detailed |